

## MAG ARC-WELDING METHOD AND WELDING APPARATUS.

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**Cited documents:**

EP0333195

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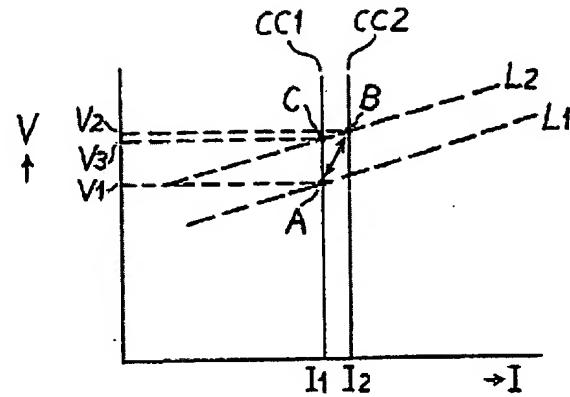
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### Abstract of EP0478796

An MAG arc-welding method for obtaining bead appearance of a regular waveform or welded beads having a suitable sectional shape and an apparatus therefor. In this method, the output current of a welding power source is switched between a first welding current  $I_1$  and a second welding current  $I_2$  which is greater than the first welding current  $I_1$  at a switching frequency of  $F = 0.5$  to  $25$  Hz. The melting rate of wire is thus varied to alternately establish a first arc length  $L_1$  longer than  $2$  mm and a second arc length  $L_2$  which is longer than the first arc length, the ratio of the second welding current  $I_2$  to the first welding current  $I_1$  being from  $1.03$  to  $1.20$ . In addition to the welding method that changes the arc length by switching the welding output current without increasing or decreasing the rate for feeding the wire, the invention provides the welding method and apparatus for effecting the butt welding or the overlapped fillet welding making it possible to effect the welding irrespective of the presence of a great gap, i.e., for obtaining an excess metal by increasing the rate of feeding the wire by  $5$  to  $20$  % to increase the rate of melting the wire to compensate the lack of molten metal for filling the gap.



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